

Remarks

Claims 1-52 are pending. The Applicant notes with appreciation the Examiner's indication of allowable subject matter in claims 1 through 41. Claims 42 through 44 and 48 through 50 were rejected under 35 USC 102(b) as being anticipated by US Patent 6,391,485 (hereinafter the '485 patent). Claims 45 through 47, 51 and 52 were rejected as unpatentable over the '485 patent. By this response, claim 42 has been amended to more particularly claim the present invention. In addition, new dependent claims 53 through 55 have been added to further distinguish over the '485 patent.

Amended claim 42 now recites that the fuel inserting valve that is fluidly connected to the cathode recirculation loop is configured to allow the introduction of fuel into the loop during select conditions associated with operation of the fuel cell. Such a construction promotes the reaction and subsequent reduction of oxygen concentrations in the cathode flowpath, which is useful for fuel cell operational transients, such as start-up and shut-down.

To anticipate a claim, a single reference must disclose each and every positively recited limitation. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). Thus, in addition to the other recited features, any purported reference must also include the fuel inserting valve as presently recited. There is no evidence that the '485 patent teaches or suggests a cathode recirculation loop that has fuel supplied to it to react with and subsequently reduce the amount of oxygen in the cathode and its related flowpath. Instead, the '485 application merely teaches a loop (made up of valves 47 and 60 and conduit 64' and 52') that is used to circulate coolant (as evidenced by FIGS. 4 through 6C, and column 2, lines 43 through 45) as a way to purge a fuel cell stack. Such a configuration is wholly at odds with the claimed device, remaining silent as to any features configured to mix and react oxygen with fuel being introduced through the fuel inserting valve for the purpose of reducing oxygen concentration in the cathode and its supporting flowpath.

Since the construction and resulting operation of the '485 patent does not include all of the recited features, the Applicant respectfully submits that claim 42 and the claims that depend

Serial No.: 10/664,329

Art Unit: 1745

therefrom are patentable over the cited art, and are entitled to a finding of allowability by the Examiner.

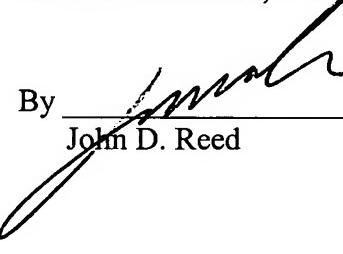
CONCLUSION

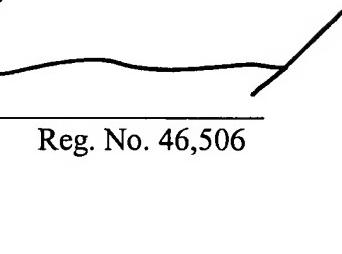
The Applicant respectfully submits that, in view of the above amendments and remarks, the application is now in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

Dinsmore & Shohl, LLP

By


John D. Reed


Reg. No. 46,506

One Dayton Centre
One South Main Street, Suite 1300
Dayton, Ohio 45402-2023
(937) 449-6453
Facsimile: (937) 449-6405

JDR/